Jurnal Wacana Ekonomi
Fakultas Ekonomi Universitas Garut
P-ISSN : 1412-5897; E-ISSN : 2715-517X

Corporate Governance and Carbon Emission Disclosure: Media Exposure as A Moderation

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Abstract

The disclosure of carbon emissions is a corporate activity to provide information about environmental performance and efforts to improve the corporate image. The aim of the research is to provide empirical evidence of the moderating influence of media exposure on the relationship between corporate governance and carbon emissions disclosure. This research is quantitative. The research object is energy companies on the Indonesia Stock Exchange (BEI). The sampling technique uses purposive sampling. The research used 72 research data. The analysis technique uses SEM PLS. The results of the research are that the board of directors influences carbon emissions disclosure and media exposure is able to moderate the relationship between the board of directors and carbon emissions disclosure.

Keywords: Energy corporations, carbon emissions, media exposure.

1 Introduction

The encouragement to disclose carbon emissions has become stronger recently. Monoxide gas makes a major contribution to increasing global warming due to greenhouse gas emissions (Florencia et al., 2021). According to CNBC Indonesia (2023), activities carried out by corporations in the energy sector contribute around 31% of carbon emissions. The disclosure of carbon emissions is an action that shows a corporation's concern for the environment (Presidential Decree No. 61 of 2011 and Regulation of the Minister of Energy and Mineral Resources of the Republic of Indonesia No. 22 of 2019). The disclosure of carbon emissions will reduce the information gap between management and the corporation's interested parties (Abbas et al., 2023). The corporations tend to choose not to disclose carbon emissions from their operations, because it causes large costs and is not effective (Desai, 2022).

Energy corporations are large-scale corporations in terms of capital and assets owned. Large corporations have large resources, making it possible to make greater disclosures of carbon emissions. The corporations have pressure to disclosures carbon emissions. According to research by Aulia Nastiti (2022), Maharani et al. (2022), Firmansyah (2021), Ratnadi (2021), I. G. Ayu et al. (2020), Mujiani (2019), Desai (2022), Indriana & Murwanto (2022), Desai (2022), Abdullah et al (2020), Bae et al (2013), Ratmono et al. (2022), Purwani & Oktavia (2018), Ahmad et al. (2020), Safitri et al. (2022), and Sari et al. (2023) stated the importance of corporations disclosing carbon emissions.

Corporations should have an adequate corporate governance system (Oyewo, 2023). Corporate governance (CG) mechanisms play a role in handling environmental risks and climate change, as well as monitoring corporate participation in managing carbon emissions. (Haque, 2017). The governance factors related to corporations, such as board structure, institutional ownership, regulations and laws, accounting and audit practices, as well as pressure from stakeholders, are considered effective and can help corporations reduce their carbon footprint and address climate-related risks (Kim & Kim, 2023).

The board of directors has the authority to participate in policy making that determines the direction and achievement of corporation targets (Nasih et al., 2019). The board of directors acts as the corporation's representative inside and outside the court, ensuring that the corporate operations run in accordance with applicable laws and regulations (Nadhif & Simamora, 2022). Research result by (Riantono & Sunarto, 2022); Nadhif & Simamora, 2022; He et al. 2019; Abbas et al., 2023), found evidence that the board size has a positive effect on carbon emissions disclosure. different research results by (Kevin, 2021) and Kuzey (2019).

This research focuses on carbon emission disclosure. According to Bernick & Finlay, (2021) stated that CDP is a global non-profit organization that focuses on carbon emission disclosure data by corporations. CDP is used to evaluate five aspects related to the availability and sustainable management of clean water and sanitation. This research uses the role of the media as a means of communication to form views and assessments of important issues. The information conveyed by the media has a major impact on the perceptions and decisions of stakeholders. The media has a crucial role in influencing stakeholder decisions because it is the main source of information as explained by (Wirawan & Setijaningsih, 2022; Fenny Novia Aulia Ulfa, 2019). The research purposes to provide empirical evidence of the influence of corporate governance on carbon emissions disclosure which is moderated by media exposure.

2 Literature Review

2.1 Legitimation Theory

Legitimation theory from Dowling, (2013) illustrates how a comparison between the values held by industry and the values in society can create a situation of legitimacy gap (Novitasari et al., 2021). Voluntary disclosure of emissions can play an important role in gaining legitimacy. Corporations build a positive image through disclosing carbon emissions in accordance with social norms related to the environment (Novitasari et al.,2021).

2.2 Carbon Emission Disclosure

Carbon emissions are carbon released into the atmosphere and result in climate change accompanied by greenhouse gas emissions (Tila et al., 2019). Natural and industrial greenhouse gases are a form of carbon emissions (Safitri et al., 2022). Disclosure of carbon emissions is an example of environmental disclosure from the additional report section which has been stated in the statement of financial accounting standards (PSAK) (Wirawan & Setijaningsih, 2022). Companies disclose carbon emissions if they feel it will provide benefits and vice versa (Desai, 2022).

2.3 The Board of Directors Size and Carbon Emissions Disclosure

The board of directors, which is part of corporate governance, functions as an effective tool in making economic decisions and corporate policies. The board of directors seeks to gain recognition of the corporation's activities involving carbon emissions by providing carbon emissions disclosures. The corporations with a large board of directors will provide information about carbon emissions more broadly. Research by (Riantono & Sunarto, 2022; Tila et al, 2019; Hermawan et al. 2018; Jose et al. 2009; Haryono, 2021), Randunu et al. 2022) found a positive result of the size of the board of directors on carbon emissions disclosure.
H1: The Board Size Has a Positive Influence on Carbon Emission Disclosure

2.4 The Board Size, Media Exposure, and Carbon Emission Disclosure

The implementation of good corporate governance is expected to increase attention to environmental issues, workplace conditions, corporate relations, financial performance, and ultimately create a positive corporate image in the public's eyes. The board of directors will strive to meet the expectations of its stakeholders regarding environmental performance through carbon emissions disclosure. The media can help improve a corporation's reputation by facilitating communication and disclosing information, especially regarding carbon emissions, which can help corporations gain legitimacy from society (Kinanti, 2023; Abdullah et al. (2020).
H2: Media Exposure weakens the influence of The Board Size on carbon emissions disclosure.

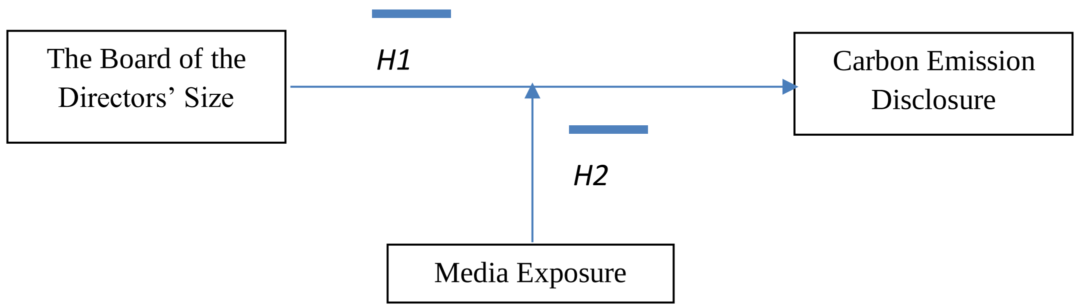

Figure 1: Research Model

3 Research Methods

This study uses a quantitative approach. The data used is from 2017-2022. This research data uses energy sector corporations. Research data was taken using purposive sampling, namely; (1) Energy sector corporations registered on the IDX in 2017-2022. (2) Corporations that publish Sustainability Reports and Annual Reports 2017-2022 consecutively and disclose carbon emissions. (3) Energy sector corporations that have complete data can be used to conduct this research.

The disclosure of carbon emissions is measured by the Carbon Disclosure Project (CDP). The measurement dimensions for carbon emission disclosure include risks and opportunities for climate change, greenhouse gas emissions, energy consumption, and costs as well as accountability for carbon emissions. CDP is calculated from the total revealed score divided by the total assigned score (Riantono & Sunarto, 2022): The board of the directors size is measured by looking at the total members of the board of directors in the company (Tila et al., 2019). Media exposure as a moderating variable is measured by looking at whether or not there is emissions disclosure on the company website, annual report and other related articles (Fenny Novia Aulia Ulfa, 2019).

This research uses descriptive statistics and SEM PLS. According to Ghozali, (2015) stated that the variance-based structural equation model (PLS) can describe direct immeasurables and manifest variables. This research statistical used Evaluation of the Measurement Model and Structural Model. SEM PLS must meet model fit. Hypothesis testing in this research was carried out by looking at the significance value. If the p value is <0.05 then the hypothesis is accepted and vice versa.

4 Results and Discussion

The objects of this research were 12 energy corporations for 6 years. So, a total of 72 data were obtained which became the object of this research.

Table 1: List of Corporations

No.	Stock code	Corporation
1	ABMM	ABM Investama Tbk.
2	PGAS	Perusahaan Gas Negara Tbk.
3	PTRO	Petrosea Tbk.
4	INDY	Indika Energy Tbk.
5	ITMG	Indo Tambangraya Megah Tbk.
6	ELSA	Elnusa Tbk.
7	MBSS	Mitrabahtera Segara Sejati Tbk
8	PTBA	Bukit Asam Tbk.
9	AKRA	AKR Corporindo Tbk.
10	PSSI	IMC Pelita Logistik Tbk.
11	MEDC	Medco Energi Internasional Tbk.
12	BUMI	Bumi Resources Tbk.

Source: Data processed in 2023.

The measures of model fit in this research model include APC = 0.210, ARS = 0.309, and AARS = 0.256. The AVIF value = 1.501 and the AFVIF value = 1.498 is lower than the criteria acceptance limit, namely ≤ 5, so it can be concluded that this research model does not have vertical collinearity problems. Tenenhaus GoF value = 0.556, meaning that the predictive power of this research model is included in the large category.

The Board of Directors Size towards carbon emissions disclosure

Based on the hypothesis testing, the path coefficient for the board of directors' size variable is 0.216, and the p value 0.012. This means that the board of directors' size has a significant positive influence on carbon emissions disclosure. Legitimation theory emphasizes that corporations must follow the rules and norms that exist in society. The board of directors' size has the responsibility to obtain good legal recognition from all parties and gain acceptance from the public for the disclosure of carbon emissions. A large board of directors will encourage corporations to provide extensive information regarding carbon emissions disclosure. This research supports research from (Riantono & Sunarto, 2022; Tila et al, 2019; Hermawan et al. 2018; Jose et al. 2009; Haryono, 2021; Randunu et al. 2022).

Media exposure moderates the board of directors' size towards carbon emissions disclosure

Based on hypothesis testing, the path coefficient for media exposure interaction is -0.209 and the p value 0.031. These results can be concluded that media exposure weakens the relationship between the board of directors and carbon emissions disclosure. Media exposure can significantly influence a corporate reputation. Media exposure can increase pressure from shareholders to take action regarding carbon emissions disclosure. The large board sizes may make corporations more vulnerable to these pressures, as decisions must involve many parties with varying interests. So, it cannot help facilitate communication and disclosure of information, especially regarding carbon emissions, which can help corporations gain legitimacy from society.

5 Conclusion

The energy corporations are large-scale corporations with high capital and business risks. The energy corporations are very interested in environmental performance to anticipate the impact of business risks. The disclosure of carbon emissions is a form of environmental performance to improve the public's image and acceptance of the corporation. The implementation of good corporate governance will be able to have an influence on wider disclosure of carbon emissions. The board of directors has the responsibility to make decisions and policies. The corporation will try to fulfill the encouragement for wider disclosure of carbon emissions. In fact, energy corporations still consider that the disclosure of carbon emissions requires a separate cost allocation, so that the company's media exposure does not provide a large portion of news related to carbon emissions. This research only focuses on energy corporations so that subsequent research can expand the research object. This research uses the board of directors` size, future research can add educational background of the board of directors, and gender.

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